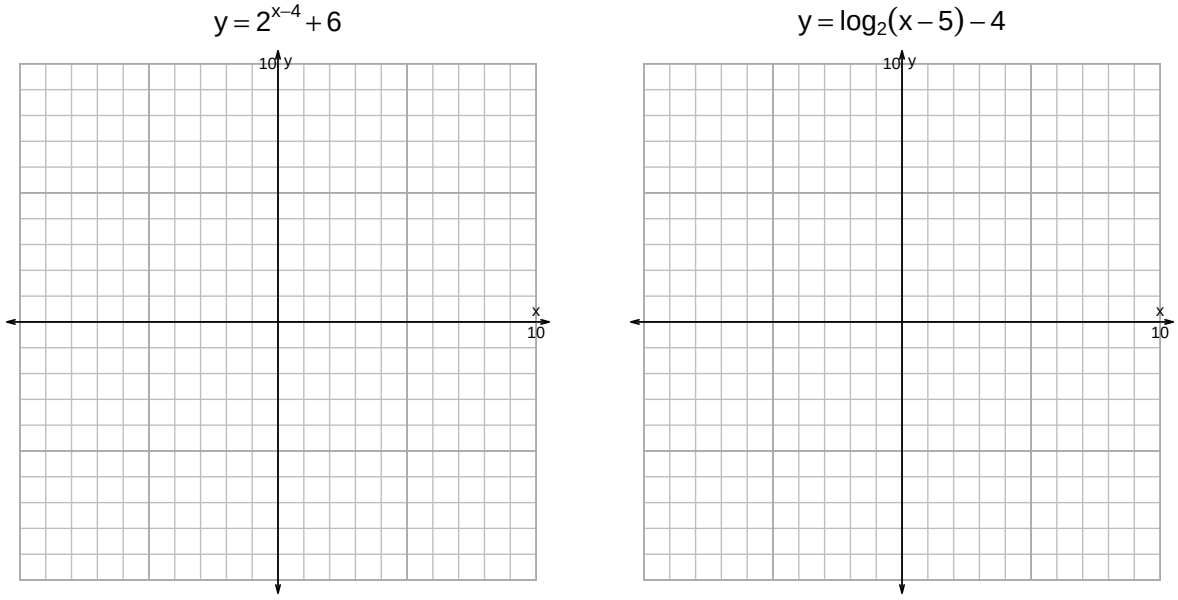
Name: Date:

s18quiz: EXP LOG (QUIZ v281)

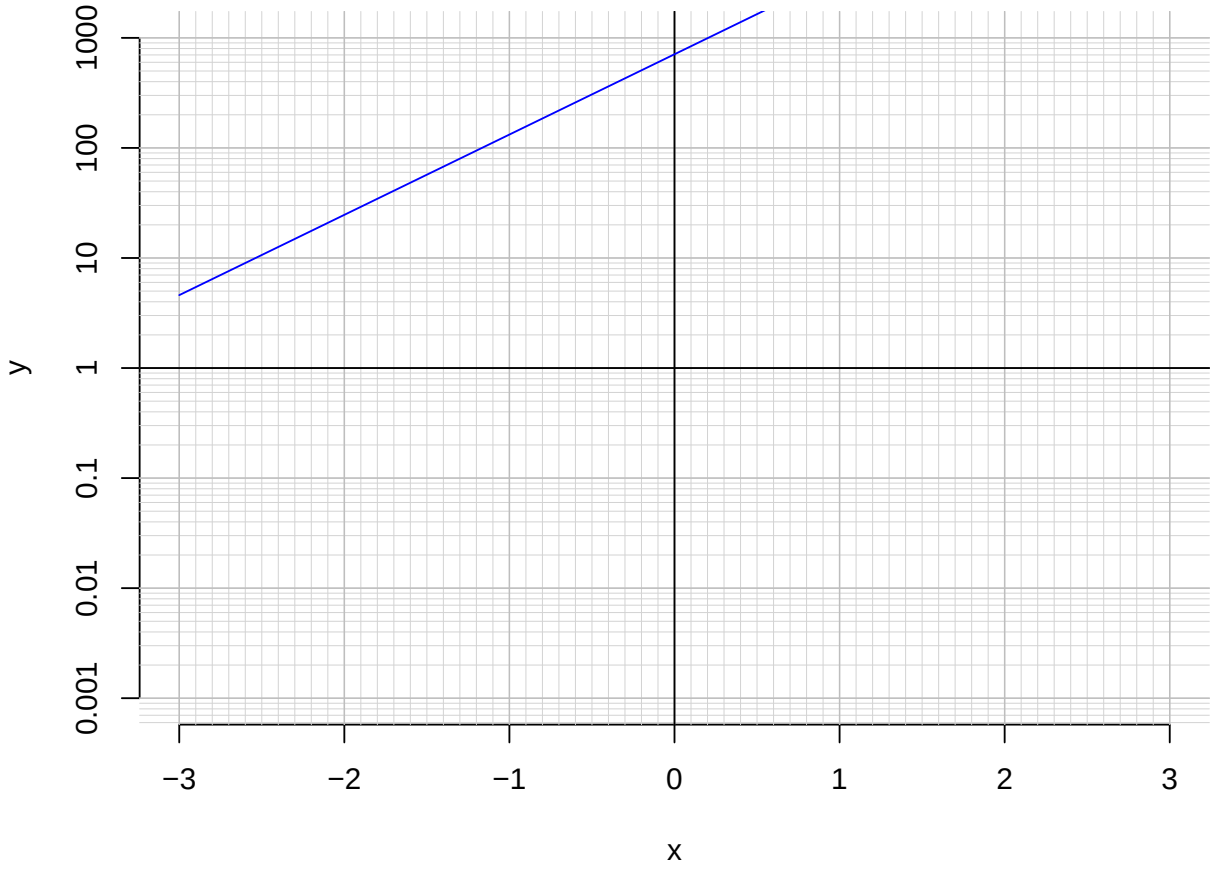
1. Graph $y = 2^{x-4} + 6$ and $y = \log_2(x-5) - 4$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-17 = \left(\frac{-3}{5}\right) \cdot 2^{7t/4}$$

3. An exponential function $f(x) = 710 \cdot e^{1.68x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(-2.6)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(600)$.